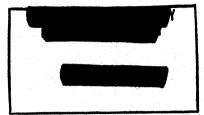
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State of Missouri **Division of Labor Standards** partment of Labor and Industrial Relations



# 1989 Statistical Report INING **1989 Statistical Report**

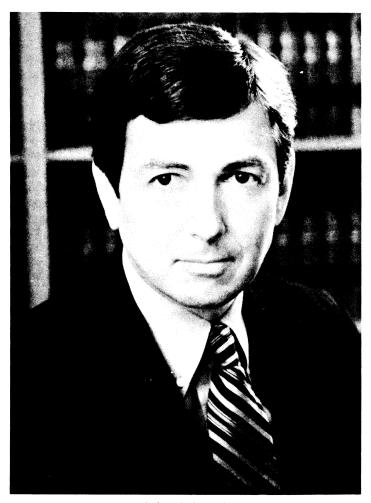
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John Ashcroft Governor

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John Ashcroft Governor

## **Forward**

Missouri's minerals production, coal, cooper and shale showed some decreases for 1989. Clay, granite, iron, lead, silica sand and zinc showed an increase for 1989.

It is our privilege to report like 1986, 1987 and 1988, there were no fatalities in Missouri Mines as inspected by this Division in 1989, which shows vigilance to insure the safety and health of mining employees in the State of Missouri. This makes four (4) years of fatality free production, from an industry that is so vitally important to the economic health of our great State, is an achievement that all Missouri Citizens can appreciate and in which we can all take great pride.

Missouri's mine safety records reflexs the on-going practice of good safety habits in the mining industry.

Our Mine Safety Training Section trained 2,709 miners in 1989. We are still operating the program with two and one-half instructors. We are still active in Mine Rescue Training also.

We are happy to see the continuing cooperation among all the people involved in the safety and health training and awareness programs.

The Division of Labor Standards/Mine Safety and Mine Inspection Sections, take this opportunity to thank the mining industry for all of their assistance and cooperation throughout the 1989 year.

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# **Missouri Minerals Production**

Kind of Mines	Tons Produced	
	1988	1989
Clay	758,679	924,055
Coal	4,057,955	3,329,894
Copper	90,550	81,449
Granite (Felsite)	373,231	396,680
Iron	898,529	1,165,344
Lead	518,476	528,525
Shale	1,026,447	982,209
Silica Sand	827,256	834,376
Zinc	85,127	102,343

Concentrates: Lead-Zinc-Copper

**Iron-Pellets** 

# Clay

Clay production in Missouri for 1989 showed an increase of 165,376 tons compared to 1988.

#### **Leading Clay Producers In 1989**

Operators	<b>Tons Produced</b>
A.P. Green	288,610
Lowe's Southern Clay	178,183
River Cement Co	131,479
Harbison-Walker Co	56,251
Southern Clay, Inc.	41,833
Raymond E. Miller Excavating	34,833

## 1980-1989 Clay Production Record

Year To	ns Produced
1980	1,074,509
1981	836,959
1982	649,613
1983	659,192
1984	841,605
1985	727,682
1986	582,524
1987	748,743
1988	758,679
1989	924,055

### Clay

Operators	# Employed	Tonnage
A.D. Willis & Son	1	9
Alsey Refractories Co.	4	21,888
A. P. Green	15	288,610
Arthur Dillon Clay Mining	2	31,866
Dillion Clay Mining Co.	6	26,039
Forest Johnson Clay Co.	5	18,431
Harbison-Walker Co.	0	56,251
Kasten Clay Products	2	18,217
Langenberg Mining Co.	3	18,668
Lowe's Southern Clay	138	178,183
National Refractories, Inc.	0	7,632
River Cement Co.	25	131,479
Southern Clay, Inc.	17	41,833
Mantle Mining Co.	0	50,116
Raymond E. Miller Excavating	Co. 2	34,833

# Coal

Coal production for 1989 showed a decrease of 728,061 tons compared to 1988.

#### **1989 Leading Coal Producing Counties**

Randolph	2,309,057
Barton	620,972
Bates	201,472
Vernon	81,985
Ralls	75,736
Putnam	40,672

#### 1989 Three Leading Coal Producing Companies

Associated Electric Corp., Inc	2,281,985
P & M Coal Co. — Empire Mine	620,118
P & M Coal Co. — Midway Mine	185,844

#### **Counties With Most Men Employed in 1989**

Randolph	340
Bates	127
Barton	63
Ralls	25
Putnam	17
Vernon	7

#### 1980-1989 Coal Production Record

Year	Tons Produced
1980	5,502,523
1981	5,242,031
1982	5,778,223
1983	5,249,461
1984	6,810,336
1985	5,458,589
1986	
1987	4,229,109
1988	
1989	3,329,894

#### Coal

Operators	# Employed	Tonnage
Associated Electric Corp., Inc.	314	2,281,985
Caylor Construction Co.	7	81,985
Missouri Mining, Inc.	17	40,672
NEMO Coal Co.	26	27,072
Pittsburg & Midway Coal Co	_	
Midway Mine	124	185,844
Pittsburg & Midway Coal Co	_	
Empire Mine	60	620,118
*Resource Recovery, Inc. —		
Riedel Energy	25	75,736
SunPyre Mining, Inc.	3	854
Sunrise Coal Co.	3	15,628

<sup>\*</sup> Formerly Burbridge Coal Co.

## **Coal Production By County**

County	Tons Produced	Fatal Accidents
Barton	620,972	0
Bates	201,472	0
Putnam	40,672	0
Ralls	75,736	0
Randolph	2,309,057	0
Vernon	81,985	0

# Iron

The 1989 production of Iron showed an increase of 266,815 tons compared to 1988.

#### 1980-1989 Iron Production Record

Year	Tons Produced
1980	
1981	
1982	807,094
1983	877,033
1984	
1985	
1986	893,945
1987	823,070
1988	898,529
1989	

#### Iron

Operator	# Employed	Tonnage
Pea Ridge Iron Ore Co.	252	1,165,344

## Lead

Lead production in Missouri for 1989 showed an increase of 10,049 tons compared to 1988. Zinc showed an increase of 17,216 tons compared to 1988, and Copper showed a decrease of 9,101 tons compared to 1988.

1980-1989 Lead, Zinc and Copper Production Record

Year	Tons Lead Produced	Tons Zinc Produced	Tons Copper Produced
1980	752,060	129,683	26,142
1981	555,776	98,269	15,384
1982	680,310	126,473	11,578
1983	638,474	122,143	13,542
1984	433,929	93,397	9,264
1985	539,459	102,006	38,910
1986	506,219	79,299	71,469
1987	420,877	72,556	53,087
1988	518,476	85,127	90,550
1989	528,525	102,343	81,449

#### Lead, Zinc and Copper

Operators	Tons Lead Produced	Tons Zinc Produced	Tons Copper Produced	# Men Employed
Cominco Metals, Inc.	89,281	14,769	4,885	135
The Doe Run Co.	321,181	54,740	76,564	302
Asarco, Inc. — West Fork	69,996	25,427		117
Asarco, Inc. — Sweetwater	48,067	7,407		129

# **Shale**

The 1989 production of Shale showed a decrease of 44,238 tons compared to 1988.

#### 1980-1989 Shale Production Record

Year		Tons Produced
1980		
1981		958,652
1982		704,442
1983	• • • • • • • • • • • • • • • • • • • •	825,670
1984	• • • • • • • • • • • • • • • • • • • •	864,916
1985	• • • • • • • • • • • • • • • • • • • •	960,435
1986	• • • • • • • • • • • • • • • • • • • •	953,741
1987	• • • • • • • • • • • • • • • • • • • •	
1988		
1989	• • • • • • • • • • • • • • • • • • • •	982,209

#### **Shale**

Operators	# Employed	Tonnage
Buildex, Inc.	22	122,376
Ceramo Co.	3	7,282
Continental Cement Co.	135	88,111
Dundee Cement Co.	31	687,186
Midland Brick & Tile Co.	2	77,254

## Silica Sand

The 1989 production of Silica Sand showed an increase of 7,120 tons compared to 1988.

#### 1980-1989 Silica Sand Production Record

Year	Tons Produced
1980	
1981	
1982	
1983	713,491
1984	692,544
1985	633,202
1986	622,848
1987	765,144
1988	827,256
1989	834,376

#### Silica Sand

Operators	# Employed	Tonnage
Master Bros. Silica Sand	6	53,328
U.S. Silica Co.	38	403,452
River Cement Co.	6	108,904
Unimin Corp.	22	268,692

## **Granite**

Operators	# Employed	Tonnage
G.A.F. Chemicals Corp.	104	387,790
Missouri Red Quarries, Inc.	14	6,150
Union Pacific Resources	2	2,740

# Fatal Accidents in Missouri Mines in 1989

No fatal accidents in Missouri Mines as inspected by the Division of Labor Standards in 1989.

# Mine Fatalities In Missouri

141111	<u>Ciutantico</u>		111 1411991	<del>Juli</del>
Year	Lead and Zinc Mines	Coal Mines	Other Mines	Total
1900	52	19	-	71
1901	41	15	-	56
1902	14	10	· -	24
1903	13	17	-	30
1904	30	11	-	41
1905	49	11	-	60
1906	58	16	-	74
1907	42	8	3	53
1908	46	10	-	56
1909	65	21	-	86
1910	45	16	-	61
1911	33	8	3	44
1912	28	19	3 2	49
1913	28	9	4	41
1914	22	19		43
1915	41	17	2 2 2	60
1916	35	6	2	43
1917	48	14	-	62
1918	16	22	1	39
1919	11	10	1	22
1920	No Report	-	-	-
1921	10	12	-	22
1922	10	6	_	16
1923	9	20	_	29
1924	12	6	_	18
1925	6	11	-	17
1926	11	7	_	18
1927	5	9	1	15
1928		11	2	21
1929	8 2 3	7		9
1930	3	10	3	16
1931	ĺ	6	2	9
1932	2	7	1	10
1933	-	19	2	21
1934	1	13	-	14
1935		9	_	11
1936	2 3 2	16	1	20
1937	2	14	2	18
1938		7	2	14
1939	5 6	1	-	7
1940	3	7	_	10
1941	3 4	8	2	14
1942	6	-	2	8
1942	4	7	2 2 2 2	13
1944	6	4	2	12

**	Lead and	Coal	Other	
Year	Zinc Mines	Mines	Mines	Total
1945	6	5 3	2 2	13
1946	1	3	2	6
1947	7	3	6	16
1948	2	1	4	7
1949	5	2	5	12
1950	2	1	4	7
1951	2	2	5	9
1952	3	3	4	10
1953	2	-	-	2
1954	-	1	1	2
1955	1	-	2	3
1956	1	-	1	2
1957	3	1	3	7
1958	2	1	3	6
1959	4	-	-	4
1960	-	-	-	0
1961	6	1	-	7
1962	-	-	-	0
1963	-	-	-	0
1964	3	-	-	3
1965	2	-	-	2
1966	1	1	2	4
1967	2	-	-	2
1968	3	-	1	4
1969	2	-	-	2
1970	3	1	-	4
1971	3	1	-	4
1972	2	1	1	4
1973	2	-	4	6
1974	2	-	3	5
1975	-	2	2	4
1976	1	-	-	1
1977	1	-	-	1
1978	-	-	2	2
1979	1	-	-	1
1980	-	-	-	0
1981	1	-	-	1
1982	2	-	-	2
1983	2 2 0	1	-	3
1984		0	-	2 3 0 2
1985	2	0	-	
1986	0	0	-	0
1987	0	0	-	0
1988	0	0	-	0
1989	0	0	-	0
Total	1,000	512	101	1,547

## Caves

An act of the 63rd General Assembly authorized and directed inspection of all Caves held open to the public and to require every Cave owner, operator or agent to provide necessary safety guard rails, bridges, ladders, entrances, platforms, walkways, safety barriers, rails, paths and other safety measures in and around any such Cave before it may be opened to the public and to file a complete and true map plan of such cave.

It shall be the duty of the Inspection Section to inspect such Caves at least once a year. The annual inspection fee will be thirty-five dollars (\$35.00).

County	Name of Cave	Address
Barry	Crystal Caverns	Cassville, MO
Boone	Boone Cave	Columbia, MO
Camden	Bridal Cave	Camdenton, MO
Camden	Ozark Caverns	Osage Beach, MO
Carter	Cave Spring Onyx Caverns	Van Buren, MO
Crawford	Cathederal Cave	Leasburg, MO
Crawford	Onondaga Cave	Leasburg, MO
Douglas	Honey Branch Cave	Sparta, MO
Franklin	Fisher's Cave	Sullivan, MO
Franklin	Meramec Caverns	Stanton, MO
Greene	Crystal Cave	Springfield, MO
Greene	Fantastic Caverns	Springfield, MO
McDonald	Ozark Wonder Cave	Noel, MO
McDonald	Bluff Dwellers Cave	Noel, MO
McDonald	Truitt's Cave	Lanagan, MO
Marion	Cameron Cave	Hannibal, MO
Marion	Mark Twain Cave	Hannibal, MO
Miller	Fantasy World Cavern	Osage Beach, MO
Morgan	Jacob's Cave	Versailles, MO
Pulaski	Onyx Mountain Caverns, Inc.	Newburg, MO
St. Francois	Bonne Terre Cave	Bonne Terre, MO
Shannon	Devil's Well	Van Buren, MO
Shannon	Round Springs	Round Springs, MO
Stone	Talking Rock Cave	Silver Dollar City, MO
Stone	Marvel Cave	Silver Dollar City, MO